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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,886	07/14/2006	Armel Le Lievre	PSA0305071	9882
29980	7590	06/03/2010	EXAMINER	
NICOLAS E. SECKEL Patent Attorney 1250 Connecticut Avenue, NW Suite 700 WASHINGTON, DC 20036			OREILLY, PATRICK F	
			ART UNIT	PAPER NUMBER
			3749	
			NOTIFICATION DATE	DELIVERY MODE
			06/03/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@seckelip.com

**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/553,886

**Applicant(s)**

LE LIEVRE, ARMEL

**Examiner**

Patrick F. O'Reilly III

**Art Unit**

3749

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 19 May 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: 10.  
Claim(s) rejected: 1-9 and 11-14.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Steven B. McAllister/  
Supervisory Patent Examiner, Art Unit 3749

/Patrick F. O'Reilly III/  
Examiner, Art Unit 3749

Continuation of 11. does NOT place the application in condition for allowance because:

As explained in detail in the Final Rejection dated February 19, 2010, independent claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being obvious over European Patent No. EP 0 985 807 A1 ("EP '807") in view of Van Bashuysen (US 4,335,849), and further in view of Carberry et al. (US 2002/0078681 A1). In his Remarks, the Applicant focuses on whether it would have been obvious to add the particle filter taught by Carberry et al. to the vehicle exhaust system disclosed in the EP '807 reference. As set forth below, the Examiner respectfully disagrees with the Applicant's allegations regarding the teachings of the EP '807 reference and Carberry et al.

Contrary to the Applicant's assertions, one of ordinary skill in the art clearly would have been motivated to add the particle filter taught by Carberry et al. immediately downstream of the catalyst (4) in the EP '807 vehicle exhaust system. Refer to EP '807, Figure 4. As discussed in the section 103 rejections, a particle filter placed downstream of the catalyst (4) in the EP '807 exhaust system would advantageously capture particulate matter, such as carbon particles, in the exhaust gas air stream prior to its passing through the heat exchanger (E), thereby preventing the heat exchanger (E) from being clogged with particulate matter from the engine (M). See pages 5-6 of the Final Rejection.

While it is true that Carberry et al. teaches that it is beneficial to periodically regenerate a particle filter in a vehicle exhaust system by incinerating the particulate matter trapped therein, it is not true that such a teaching would dissuade one of ordinary skill in the art from placing such a filter downstream of the catalyst (4) in EP '807. First, it is important to look at the manner in which the particle filter taught by Carberry et al. is regenerated. In this regard, Carberry et al. teaches that, in order to increase the exhaust gas temperature above a predetermined regeneration temperature (e.g., 450 deg. C), the throttle valve (18) of the engine (12) is moved to a partially closed position. Refer to Carberry et al., page 2, paragraph [0018]. With the particle filter added to the EP '807 exhaust system, it is certainly possible to modulate the throttle valve (18) of the engine (M) in EP '807 towards a closed position so that the particle filter can be regenerated. Also, the placement of the particle filter in a location immediately downstream of the catalyst (4) would be particularly beneficial because it is located in close proximity to the engine (M). Secondly, the Applicant erroneously concludes that, because the catalyst (4) is used in a cold-start phase during its normal operation, the regeneration of the particle filter in the modified exhaust system of EP '807 would not be possible without making significant modifications to the catalyst (4). The Examiner would like to emphasize that the regeneration of the particle filter is not required to be conducted during the normal operating phase of the catalyst with which it is associated. Thus, just because the normal operating phase of the catalyst (4) in EP '807 is during the cold-start of the engine (M), the regeneration of a particle filter located downstream of the catalyst (4) would not have to be done during the cold-start phase. In fact, it would be most desirable to never perform the regeneration during the normal operating phase of the catalyst. In addition, because the regeneration of the particle filter is initiated by altering the position of the engine throttle valve, the addition of the particle filter downstream of the catalyst (4) in EP '807 would not necessitate any extensive changes to the exhaust system as the Applicant so alleges. Therefore, the limitations set forth in independent claims 1 and 8 of this application clearly are rendered obvious by the combined teachings of EP '807, Van Bashuysen, and Carberry et al.

In their present form, the claims fail to define over the teachings of the references relied upon in the Final Rejection. However, the Examiner would like to make some suggestions as to how the claims could be amended at least to define over the prior art of record. Most importantly, independent claims 1 and 8 could be amended so as to positively recite that the portion of the exhaust system located between the heat exchanger and the exhaust system outlet does not contain a depollution assembly. Such a limitation would clearly define over the EP '807 reference because the deletion of the main catalyst (5) in EP '807 would completely destroy the intended functionality of the exhaust system disclosed therein. In addition, independent claims 1 and 8 could be amended so as to clarify that the recited "circuit" is an "engine cooling circuit".